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ABSTRACT

Men dominated the teaching positions in five of nine vocational program areas during 1979-80: industrial-arts (96.6 percent of full time positions), agriculture (93.5 percent), technical (92.8 percent), trade and industrial (91.4 percent), and distribution (69.5 percent) according to a survey of 282,292 full time instructional staff analyzed through the Vocational Education Data System (VEDS). Women staff comprised majorities in consumer and homemaking (96.1 percent), occupational home economics (88.8 percent), health (82.7 percent), and office occupations (64 percent). For three of the four types of institutions studied (secondary, postsecondary, vocational technical institutes, and other postsecondary programs) staffs were overwhelmingly male in traditionally male fields and overwhelmingly female in fields traditionally considered to be for females. Only in higher education were these patterns broken, showing more balanced distribution. Estimates of data on racial/ethnic characteristics indicate that about 11 percent of the full time instructors in vocational education programs were minorities with 8.8 percent black, 1.5 percent Hispanic, 0.8 percent Asian or Pacific Islanders, and 0.3 percent American Indians/Alaskan Natives. Minority instructors were concentrated in occupational home economics, office occupations, industrial arts, and consumer and homemaking programs; few taught in technical and distributive education. Minority groups, however, varied according to program areas and types of institutions. (KC)

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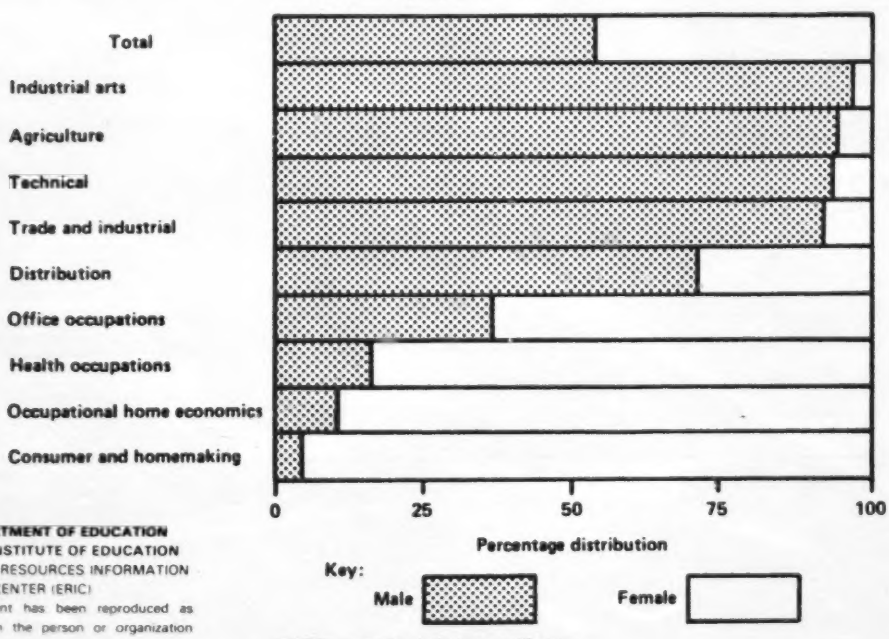
Sex and Racial/Ethnic Characteristics of Full-Time Vocational Education Instructional Staff

Men dominated the teaching positions in five of nine vocational program areas in 1979-80, according to the National Center for Education Statistics (NCES). In four of the five areas, over 90 percent of the staff were men. Women held high proportions of teaching jobs in three of the nine program areas.

Data gathered during the 1979-80 academic year showed male instructors predominating in industrial arts (with 96.3 percent of full-time positions), agriculture (93.5 percent), technical (92.8 percent), trade and industrial (91.4 percent) and distribution (69.5 percent). Women staff comprised majorities in consumer and homemaking (96.1 percent), occupational home economics (88.8 percent), health (82.7 percent) and office occupations (64.0 percent).

Chart 1.--Percent distribution of instructional staff in vocational education (secondary and postsecondary), by sex and program area: 1979-80



NOTE: Includes full-time staff only.

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These and other data were reported to NCES by State education agencies through the Vocational Education Data System (VEDS). The data included here describe the sex and racial/ethnic characteristics of full-time instructional staff for the nine program areas. These areas are used to group vocational programs administered under the Vocational Education Act (VEA, P.L. 94-482).

Sex of Instructional Staff, by Type of Institution

Four types of institutions were described by the data: secondary institutions and three types of postsecondary institutions (higher education, State-approved and other--see Technical Notes for definitions). For three of these four types, in program areas traditionally considered female, the staff were overwhelmingly female. Only in institutions of higher education was this pattern broken. In these institutions, three program areas had a more balanced distribution of female staff than the same program areas in the other three types of institutions (occupational home economics, office occupations, and consumer and homemaking--see table 1). In program areas considered traditionally male, a similar pattern held, this time with male staff dominating. Again, institutions of higher education showed a more balanced distribution in two of these program areas (agriculture and industrial arts).

Table 1.--Females as a percent of the total instructional staff (VEA), by institutional type and program area: 1979-80

Program area	All institutions	Secondary	Postsecondary		
			Higher education	State-approved	Other
Percent instructors classified by sex...	90.7	97.8	70.9	98.8	80.4
Agriculture.....	6.5	6.1	10.3	6.0	7.8
Distribution.....	30.5	32.1	23.6	34.8	37.2
Health.....	82.7	89.9	79.5	87.2	78.2
Occupational home economics.....	88.8	91.5	75.6	83.2	81.2
Office occupations...	64.0	69.2	40.4	73.8	77.5
Technical.....	7.2	11.5	7.5	3.0	2.8
Trade and industrial.	8.6	9.3	8.7	6.1	5.3
Consumer and homemaking.....	96.1	97.7	71.7	89.5	85.1
Industrial arts.....	3.7	3.7	24.1	0	0
Other not elsewhere classified.....	55.3	59.1	20.7	19.2	59.3

NOTE: Calculated using only those States reporting staff totals by sex. For each level, at least one State was excluded.

Racial/Ethnic Characteristics

Estimates of data on racial/ethnic characteristics indicate that about 11 percent of the full-time instructors in vocational education programs were minorities (table 2). Of the total, 8.8 percent were black, 1.5 percent were Hispanic, 0.8 percent were Asian or Pacific Islanders and 0.3 percent were American Indian/Alaskan Native.

Further examination of available racial/ethnic data shows that minority instructors were concentrated in certain program areas. Minorities comprised 15 percent of the instructors in occupational home economics and 12 percent in office occupations, industrial arts, and consumer and homemaking. On the other hand, minorities accounted for only about 6 percent of the staff teaching technical and distribution courses (table 3).

Each minority group was different, however, in the program areas in which it had the highest and lowest concentrations. For example, blacks comprised 12.7 percent of instructional staff in occupational home economics and only 2.6 percent in technical fields. It should be noted that programs not classified in the nine program areas had very high concentrations of minority teachers (16.0 percent), especially blacks (13.5 percent--table 3). Because programs were assigned to areas by State agencies, the exact nature of this group of programs is unknown.

The concentration of minority instructors also varied according to the type of institution. In vocational programs in secondary schools, minorities comprised almost 13 percent of the instructors, compared to between 7 to 9 percent in the three types of postsecondary institutions (table 4).

Among minorities in each of the four types of institutions, blacks were best represented in secondary schools (10.2 percent). The highest percentage of Asian or Pacific Islanders was in institutions of higher education (1.4 percent), where they were at least twice as large a proportion as in any other type of institution. Differences among institutional types were not large for the other minority groups.

Table 2.--Distribution of instructional staff (VEA), by race/ethnicity: 1979-80

Item	Total instructional staff	Number staff classified by race	Minority subtotal	American Indian/ Alaskan Native	Asian or Pacific Islander	Black, not Hispanic	Hispanic	White, not Hispanic
Number.....	282,292	232,052	26,419	679	1,763	20,499	3,478	205,633
Percentage distribution...		100.0	11.4	0.3	0.8	8.8	1.5	88.6

Table 3. Distribution of instructional staff (VEA) by race/ethnicity, and by program area: 1979-80

Program area	Total instructional staff	Total classified by race	American Indian/ Alaskan Native	Asian or Pacific Islander	Black, not Hispanic	Hispanic	White, not Hispanic
Agriculture	15,731	14,334	78	79	771	114	13,292
Distribution	13,238	10,969	28	59	494	113	10,275
Health	20,171	15,446	42	157	939	195	14,113
Occupational home economics	9,483	8,101	16	114	1,026	102	6,843
Office occupations	59,130	45,517	83	414	4,543	625	39,852
Technical	11,760	7,470	26	100	195	78	7,071
Trade and industrial	63,167	53,938	185	401	3,743	1,077	48,532
Consumer & homemaking	34,110	29,656	99	192	2,931	333	26,101
Industrial arts	17,835	11,882	31	46	1,173	181	10,451
Other not elsewhere classified	37,667	34,739	91	201	4,684	660	29,103
				Percentage distribution[1/]			
Agriculture		100.0	0.5	0.6	5.4	0.8	92.7
Distribution		100.0	0.3	0.5	4.5	1.0	93.7
Health		100.0	0.3	1.0	6.1	1.3	91.4
Ocupational home economics		100.0	0.2	1.4	12.7	1.3	84.5
Office occupations		100.0	0.2	0.9	10.0	1.4	87.6
Technical		100.0	0.3	1.3	2.6	1.0	94.7
Trade and industrial		100.0	0.3	0.7	6.9	2.0	90.0
Consumer & homemaking		100.0	0.3	0.6	9.9	1.1	88.0
Industrial arts		100.0	0.3	0.4	9.9	1.5	88.0
Other not elsewhere classified		100.0	0.3	0.6	13.5	1.9	83.8

1/ Percentage distribution based only on instructional staff classified by race/ethnicity.

NOTE: Details may not add to totals because of rounding.

Table 4.--Distribution[1] of instructional staff (VEA), by race/ethnicity and by institutional type: 1979-80

Race ethnicity	Secondary institutions		Postsecondary institutions					
			Higher education		State-approved		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total reported	192,928	--	63,504	--	8,380	--	17,480	--
Total staff classified by race	167,079	100.0	44,733	100.0	8,059	100.0	12,181	100.0
Subtotal of minority	21,260	12.7	3,456	7.7	611	7.6	1,092	9.0
American Indian/ Alaskan Native	457	0.3	154	0.3	36	0.4	32	0.3
Asian or Pacific Islander	1,089	0.7	628	1.4	23	0.3	23	0.2
Black, not Hispanic	17,118	10.2	2,015	4.5	475	5.9	891	7.3
Hispanic	2,596	1.6	659	1.5	77	1.0	146	1.2
White, not Hispanic	145,819	87.3	41,277	92.3	7,448	92.4	11,089	91.0

[1]Percentage distribution based only on staff classified by race/ethnicity.

NOTE: Details may not add to totals because of rounding.

Technical Notes

Data on staff in vocational programs administered under the Vocational Education Act (VEA) were reported to VEDS by State agencies according to four institutional types, which differ from the earlier levels used to report vocational education data. These types include secondary institutions and three types of institutions offering postsecondary programs:

Institutions of higher education. "Regionally accredited" schools included in the Higher Education General Information System (HEGIS);

State-approved (noncollegiate). Generally area vocational/technical institutes or institutions established by State law or policy); and

Other postsecondary. Institutions primarily serving secondary students, offering adult programs designed for persons who have completed or left high school. For example, adult day or evening programs in an area vocational school, a comprehensive, specialized or technical high school would be included in this category.

This report covers 282,292 full-time instructional staff only. It excludes the 95,769 part-time instructional staff for whom racial/ethnic and sex data were not collected.

Federal race/ethnicity categories were used in the VEDS survey. States were asked to provide self-identified racial/ethnic designations, but if a person refused to identify his or her race/ethnicity, identification by the institution was used. Definitions of racial/ethnic categories are as follows:

American Indian or Alaskan Native -- A person having origins in any of the original peoples of North America, or who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander -- A person having origins in any of the original peoples of the Far East, Southeast Asia, and Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, Samoa and Vietnam.

Black, not of Hispanic Origin -- A person having origins in any of the black racial groups of Africa (excluding Hispanic).

Hispanic -- A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spainish culture or origin, regardless of race.

White, not of Hispanic Origin -- A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (excluding Hispanics)

The distributions of instructional staff by sex and race/ethnicity presented here have been calculated on the basis of data for which these characteristics were reported. No attempt has been made to impute missing data. Several States did not report sex of staff for some institutional types: one for secondary institutions, six for institutions of higher education, one for State-approved institutions, and two for other post-secondary institutions. Also, approximately 18 percent of instructional staff were not classified by race, since four States provided no reports of race/ethnicity, and several other States did not classify any staff by race (see table A).

The data on instructional staff presented here may be compared with those reported in another survey conducted one year earlier, in fall 1979, by the Office for Civil Rights (OCR). The OCR survey was conducted of all institutions offering five or more vocational programs. While not surveying a universe coincident with that of all VEA-administered programs, data from OCR and from VEDS could be expected to show reasonable agreement. Comparisons of sex and race/ethnicity of instructional staff as described by the VEDS and OCR surveys show considerable agreement in most areas (compare tables 1 and 3 with table B). The proportions of female teachers in each program area differ most in the distribution area, where the difference is 3 percentage points. For all other areas, the difference between results of the two surveys is less than 2 percentage points. Closer agreement may be seen in comparisons of race/ethnicity staff distributions, with the single exception of consumer and homemaking. In this area, OCR reported 13.4 percent of the total as black, and 84.0 percent white in 1979, while for VEDS in 1979-80 the reported figures were 9.9 percent black and 88.0 percent white.

For More Information

Information about the Center's statistical program and a catalog of NCES publications may be obtained from the Statistical Information Office, National Center for Education Statistics, (Mail Stop 1001), 400 Maryland Avenue, S.W., Washington, D.C. 20202, telephone (301) 436-7900.

TABLE A.—NUMBER OF VOCATIONAL EDUCATION INSTRUCTIONAL STAFF (UNDUPLICATED) (VEA) BY RACE/ETHNICITY AND BY STATE: 1979-80

STATE	TOTAL INSTRUCTIONAL STAFF	TOTAL CLASSIFIED BY RACE	AMERICAN INDIAN/ ALASKAN NATIVE	ASIAN OR PACIFIC ISLANDER	BLACK, NOT HISPANIC	HISPANIC	WHITE, NOT HISPANIC
50 States and D.C.	282,292	232,052	679	1,763	20,499	3,478	205,633
ALABAMA	3,729	3,729	0	0	763	4	2,962
ALASKA	175	175	3	0	8	4	160
ARIZONA	6,977	6,977	181	5	81	396	6,314
ARKANSAS	1,802	1,802	5	1	202	1	1,591
CALIFORNIA	20,850	20,850	87	523	1,023	1,071	18,146
COLORADO	2,832	2,83[illegible]	9	21	41	99	2,662
CONNECTICUT	4,657	0	-	-	-	-	-
DELAWARE	949	949	3	4	177	5	760
D.C.	490	490	0	0	468	1	21
FLORIDA	11,298	11,298	32	9	1,614	185	9,458
GEORGIA	5,294	5,294	7	3	1,062	12	4,210
HAWAII	889	889	1	682	3	6	197
IDAHO	886	886	2	5	0	4	875
ILLINOIS	12,665	12,665	2	53	1,225	58	11,327
INDIANA	5,318	2,056	2	0	129	2	1,923
IOWA	2,288	2,288	12	5	13	9	2,249
KANSAS	2,012	2,012	1	3	10	7	1,991
KENTUCKY	5,264	5,264	2	2	187	3	5,070
LOUISIANA	3,530	3,530	1	4	954	8	2,563
MAINE	2,125	363	1	0	0	0	362
MARYLAND	6,643	6,203	33	43	1,129	17	4,981
MASSACHUSETTS	7,061	6,331	1	6	113	31	6,180
MICHIGAN	6,502	5,529	28	19	372	14	5,096
MINNESOTA	4,564	4,564	13	17	31	7	4,496
MISSISSIPPI	2,581	2,581	0	0	681	0	1,900
MISSOURI	5,545	0	-	-	-	-	-
MONTANA	686	0	-	-	-	-	-
NEBRASKA	1,728	1,728	10	0	6	0	1,712
NEVADA	887	887	5	2	38	13	829
NEW HAMPSHIRE	1,092	1,092	-	4	3	-	1,085
NEW JERSEY	7,002	7,002	2	12	623	26	6,339
NEW MEXICO	880	880	3	3	2	209	663
NEW YORK	27,599	0	-	-	-	-	-
NORTH CAROLINA	8,051	8,051	43	12	1,244	5	6,747
NORTH DAKOTA	913	913	7	0	0	1	905
OHIO	36,443	36,443	13	58	4,310	152	31,910
OKLAHOMA	4,143	2,041	48	4	66	3	1,920
OREGON	2,849	2,771	6	26	21	21	2,697
PENNSYLVANIA	9,433	9,433	4	18	464	12	8,935
RHODE ISLAND	1,101	1,101	0	0	7	6	1,088
SOUTH CAROLINA	4,741	2,599	1	0	736	1	1,861
SOUTH DAKOTA	600	600	0	0	0	1	599
TENNESSEE	4,519	4,519	4	8	523	2	3,982
TEXAS	14,356	14,356	19	17	1,044	989	12,287
UTAH	1,464	1,464	13	5	2	7	1,437
VERMONT	649	430	2	-	-	1	427
VIRGINIA	8,261	8,261	10	42	896	33	7,280
WASHINGTON	8,595	8,595	39	117	77	37	8,325
WEST VIRGINIA	2,443	2,443	13	15	56	4	2,355
WISCONSIN	6,298	6,253	11	13	95	10	6,124
WYOMING	633	633	0	0	0	1	632

- Not reported.

Table B. Distribution of full-time vocational staff in institutions with five or more vocational programs, by sex and race/ethnicity: Fall 1979

Program area	Total	Sex		Racial/ethnic group				
		Male	Female	American Indian/ Alaskan Native	Asian American or Pacific Islander	Black, not Hispanic	Hispanic	White, not Hispanic
				Percentage distribution				
Total	100.0	60.2	39.8	0.3	0.8	8.1	1.6	89.2
Agriculture	100.0	94.8	5.2	0.4	0.6	6.2	0.9	92.0
Distribution	100.0	72.6	27.4	0.3	0.5	4.0	1.4	93.8
Health	100.0	16.6	83.4	0.3	0.9	6.0	1.2	91.6
Occupational home economics	100.0	10.1	89.9	0.2	0.7	12.3	1.4	85.4
Office occupations	100.0	37.4	62.6	0.3	1.1	10.3	1.4	87.0
Technical	100.0	90.8	9.2	0.3	1.1	2.8	1.5	94.3
Trade & industrial	100.0	91.3	8.7	0.4	0.6	7.0	2.1	89.9
Consumer & homemaking	100.0	2.0	98.0	0.2	0.9	13.4	1.4	84.0
Industrial arts	100.0	96.3	3.7	0.3	0.5	10.1	1.8	87.3

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.